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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,147	01/21/2002	Nobuhiro Itoh	2271/66652	5134

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EXAMINER

WORKU, NEGUSSIE

ART UNIT PAPER NUMBER

2625

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/054,147

Applicant(s)

ITOH, NOBUHIRO

Examiner

Negussie Worku

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office action is in response to amendment filed on Jan 18, 2007. Claims 1-12 and 14-15 are pending in the application, in which, claim 13 is cancelled.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/11/07, has been entered.

Response to Arguments

3. Applicant's arguments filed 06/11/07 have been fully considered but they are not persuasive. A response to applicant's arguments has been discussed in last pages of this Office action.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art

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to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihara et al. (USP 5,465,163) in view of Goldberg et al. (USP 6,223,181).

Regarding to claim 1, Yoshihara teaches or discloses a facsimile device (a image reading device of fig 1 and 2), inputting means (20 of fig 1) including scanner means (scanner 20 of fig 2) to scan a subject copy having a size larger than A3-size and generate image data based on the scanning of said subject copy, see (col.6, lines 14-25); reading dividing means (scanner 20 of fig 1 and 2) for automatically dividing in a sub-scanning direction said image data of said subject copy of the size larger than the A3-size into a plurality of read areas according to a specified overlapping width, each read area including divisional lines of data having a predetermined width, (as shown in fig 5, one image original is divided and is read in four reading portion, col.5, lines 35-40).

Yoshihara does not disclose image rotating means for performing an image rotation with respect to each of said divisional lines of data so as to supply rotated divisional lines; an encoding means for encoding each of said rotated divisional lines into encoded data; and outputting means for outputting said encoded data.

Goldberg et al. in the same area of image reading and processing apparatus teaches image rotating means (image processing module 10, comprises a rotation module 20) for performing an image rotation with respect to each of said divisional lines of data so as to supply rotated divisional lines (col.3, lines 20-30); an encoding means (encoder/decoder module 18 of 1A) for encoding each of said rotated divisional lines

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into encoded data, col.3, lines 30-40); and outputting means (6 of fig 1A) for outputting said encoded data, (col.3, lines 1-5).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Yoshihara et al. to include: image rotating means for performing an image rotation with respect to each of said divisional lines of data so as to supply rotated divisional lines; an encoding means for encoding each of said rotated divisional lines into encoded data; and outputting means for outputting said encoded data.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging device of Yoshihara et al. by the teaching of Goldberg et al., for the purpose to provide a system for performing rotation of an image, that is capable of reducing the memory needed for rotation while providing flexibility in image transmission and processing techniques that can be used to reconstruct the image.

Regarding to claim 2, Yoshihara teaches or discloses a facsimile device (a image reading device of fig 1 and 2), wherein said reading means (image reading device 20 of fig 3) divisively reads said lines of said image data in said sub-scanning direction by scanning a plurality of areas [original is divided and is read in plurality of area, col.5, line 35] of said image data sharing an overlapping width predetermined in said sub-scanning direction, (col.5, line 35-37, [overlap areas and broken lines, col.6, lines 14-25]).

Regarding to claim 3, Yoshihara teaches or discloses a facsimile device (a image reading device of fig 1 and 2), wherein said reading means (20 of fig 3) divisively reads said lines of said image data in said sub-scanning direction by dividing said image data of the subject copy at a predetermined page [original is divided and is read in plurality of area, col.5, line 35] into said divisional lines of data (col.5, lines 40-45)

Regarding to claim 4, Yoshihara teaches or discloses a facsimile device (a image reading device of fig 1 and 2), wherein said reading means (20 of fig 3) reductively reads image data of a subject copy having a width larger than said A3-size width by reducing said image data as a whole to said A3-size width, (col.6, lines 14-18) when said subject copy is not at a page to be divisively read, [original is divided and is read in plurality of area, col.5, line 35] (col.5, lines 40-45).

6. ***Claims 5-12, and 14-15, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihara et al. (USP 5,465,163) in view of Goldberg et al. (USP 6,223,181) and Murakami et al (USP 6,148,118)***

Regarding to claim 5, Yoshihara teaches or discloses a facsimile device (a image reading device of fig 1 and 2) a method comprising: inputting step (image reading unit 20 of fig 2) of inputting image data of a subject copy having a width in a main scanning direction larger than an A3-size width, inputting means including scanner means to scan the subject copy having a size larger than the A3-size, see (col.6, lines 14-25), see

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(col.6, lines 14-25); reading step (scanner 20 of fig 1 and 2) for divisively reading lines of said image data in a sub-scanning direction by dividing said image data into divisional lines of data having a predetermined width, (as shown in fig 5, one image original is divided and is read in four reading portion, col.5, lines 35-40).

Yoshihara does not disclose image rotating step for performing an image rotation with respect to each of said divisional lines of data so as to supply rotated divisional lines; an encoding step for encoding each of said rotated divisional lines into encoded data; and outputting means for outputting said encoded data.

Goldberg et al. in the same area of image reading and processing apparatus teaches image rotating means (image processing module 10, comprises a rotation module 20) for performing an image rotation with respect to each of said divisional lines of data so as to supply rotated divisional lines (col.3, lines 20-30); an encoding means (encoder/decoder module 18 of 1A) for encoding each of said rotated divisional lines into encoded data, col.3, lines 30-40); and outputting means (6 of fig 1A) for outputting said encoded data, (col.3, lines 1-5).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Yoshihara et al. to include: image rotating means for performing an image rotation with respect to each of said divisional lines of data so as to supply rotated divisional lines; an encoding means for encoding each of said rotated divisional lines into encoded data; and outputting means for outputting said encoded data.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging device of Yoshihara et al. by the teaching of Goldberg et al., for the purpose to provide a system for performing rotation of an image, that is capable of reducing the memory needed for rotation while providing flexibility in image transmission and processing techniques that can be used to reconstruct the image.

Yoshihara et al. as modified by Goldberg et al. still do not teach determining whether the size of the subject copy larger than the A3-size, and if the size of the subject copy is larger than the A.3-size, automatically divides the subject copy into at least two read areas according to a specified overlapping width.

Murakami et al. teaches determining (image reading portion 2 of fig 1) whether the size of the subject copy larger than the A3-size, (A3 of fig 29) and if the size of the subject copy is larger than the A.3-size, (col.16, lines 40-50) automatically divides the subject copy into at least two read areas according to a specified overlapping width (col.17, lines 1-10).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Yoshihara et al. as modified by Goldberg et al. by: providing detecting whether the size of the subject copy larger than the A3-size, and if the size of the subject copy is larger than the A.3-size, automatically divides the subject copy into at least two read areas according to a specified overlapping width.

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It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging device of Yoshihara as modified by Goldberg et al., by the teaching of Murakami because of the following reasons:

It would have allowed a user to have a joining technique, which avoids loss and overlap of image, and the adjacent portions of image are read in an overlapped manner so that no part of the original image is lost at over lapping part of the document.

Regarding to claim 6, Yoshihara teaches or discloses the method (a image reading device of fig 1 and 2), wherein said reading step (image reading device 20 of fig 3) divisively reads said lines of said image data in said sub-scanning direction by scanning a plurality of areas [original is divided and is read in plurality of area, col.5, line 35] of said image data sharing an overlapping width predetermined in said sub-scanning direction, (col.5, line 35-37, [overlap areas and broken lines, col.6, lines 14-25]).

Regarding to claim 7, Yoshihara teaches or discloses the method (a image reading device of fig 1 and 2), wherein said reading step (20 of fig 3) divisively reads said lines of said image data in said sub-scanning direction by dividing said image data of the subject copy at a predetermined page [original is divided and is read in plurality of area, col.5, line 35] into said divisional lines of data (col.5, lines 40-45)

Regarding to claim 8, Yoshihara teaches or discloses the method (a image reading device of fig 1 and 2), wherein said reading step (20 of fig 3) reductively reads image

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data of a subject copy having a width larger than said A3-size width by reducing said image data as a whole to said A3-size width, (col.6, lines 14-18) when said subject copy is not at a page to be divisively read, [original is divided and is read in plurality of area, col.5, line 35] (col.5, lines 40-45).

With respect to claim 9, Yoshihara et al. teaches the facsimile device (fig 1-3) wherein said reading means (read image 20 of fig 3) detects whether the width of said subject copy in the main scanning direction is larger than an A3-size width, (co.5, lines 5, 30-35) and if the width of said subject copy is larger than an A3-size width, (original image fig 6(1), which is larger in size than A3-size divided in four portion, reduce into one image having the size of A3-size image, col.6, lines 150 20) automatically dividing said subject copy in the sub-scanning direction into at least two portions (fig 5, a divided original image into four different portion).

With respect to claim 10, Yoshihara et al. teaches the facsimile device (fig 1-3), further comprising user operation means, (operation unit 10 of fig 1) wherein a user specifies a page dividing mode through said user operation means, (col.4, lines 5-10) and said reading means (20 of fig 1) performs said automatic dividing if the user specifies said page dividing mode, (col.4, lines 55-60).

With respect to claim 11, Yoshihara et al. teaches the facsimile device (fig 1-3), wherein the divisional lines of data (col.4, lines 60-65) corresponding to the encoded

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data out by said outputting means (image out put 40 of fig 3) are un-changes in scale (the outputted image is not changed in size, (col.6, line 45-50).

With respect to claim 12, Yoshihara et al. teaches the facsimile device (fig 1-3), wherein, the at least two portions of the subject copy are automatically determined according to an overlapping width specified by an operator (col.6, lines 14-25).

With respect to claim 14, Yoshihara et al. teaches the facsimile device (fig 1-3) wherein said encoded data output by said outputting means conforms to an A3-size width requirement, (col.6, lines 14-25).

With respect to claim 15, Yoshihara et al. teaches the facsimile device, (fig 3) wherein each of said at least two read areas is no greater than the A3-size, (col.6, lines 14-25).

Response to the arguments

7. Examiner has carefully reviewed and considered the applicant's comments as indicated on page 6-9, which is filed on 06/11/07. Based on interview conducted on June 4, 2007 with applicant's representative, Examiner had agreed to further review the claimed invention (claims 1 and 5) up on applicant's written response in view of applicant's proposed amendments.

However, up on further consideration examiner respectfully submit that the previously submitted Office action has been modified based on the amendment made by applicant in view of the cited prior arts, and therefore, examiner respectfully submitted that independent claims 1 and 5 are not patentable over the cited arts, for at least the following reasons:

a) In page 8 and 9 of applicant's response applicant argues that: the prior arts does not teach the subject matter of claim 1 and 5, wherein a facsimile device which scans the large size subject copy and generates image data of the large-size subject copy as a single image, and then automatically divides the image data in a sub-scanning direction into a plurality of read areas according to a specified overlapping width, if the size of the subject copy is larger than the A3-size.

Examiner respectfully disagree because Yoshihara which proposes reducing the large image size copy is divided into four pages scanned and transmitted or sent to another device, and therefore, where in a large size copy scanned and image data are divided in the sub scanning direction and processed to be transmitted as discussed in the Office action. Yoshihara alone or in combination with Goldberg teaches or suggests the subject matter of the claim 1 and 5, as discussed in the newly modified Office action, and therefore, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the

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applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Furthermore, in response to applicant's arguments against the references individually, since the rejection is based on a combination of references or prior arts one cannot show nonobviousness by commenting on a particular reference the individually where the rejections are based on combinations of references.

Therefore, It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging device of Yoshihara as modified by Goldberg et al., (claim 1), and by the teaching of Murakami (claim 5), the reason doing so is that, It would have allowed a user to have a joining technique, which avoids loss and overlap of image, and the adjacent portions of image are read in an overlapped manner so that no part of the original image is lost at over lapping part of the document.

Therefore, the rejection to claims 1 –12 and 14, have been maintained, and this Office action is non-final.


Contact information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Negussie Worku whose telephone number is 57272-7472. The examiner can normally be reached on 9am-6pm.

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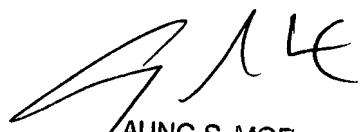
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on 571-272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Negussie Worku

07/28/07



AUNG S. MOE
SUPERVISORY PATENT EXAMINER
8/3/07